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RESPONSE TO REQUEST FOR INFORMATION

DATE: April 26, 2016 **RFI No.** 004

PROJECT: Waitsfield BRF 013-4(39) - Bridge No. 177

VT Route 100 over Mad River

TO: Rob Young

FROM: Josh Lund

RE: RFI #4: Proposed Detailing & Fabrication of Abutment 2 Precast Pile Caps, Mark

Nos. 'MD-PC1' & 'MD-PC5'

McFarland Johnson (MJ) has reviewed RFI No. 004 and we offer the following response:

1. Question: Can the projecting cheekwalls at Abutment 2 be cast in the field as detailed in JPC RFI #4 request.

Response: MJ has reviewed the attached RFI request and find the concept acceptable. Note the precast surface area that shall be in contact with the proposed cast-in-place concrete shall be shop roughened. The actual proposed details of the request will be subject to review and approval as part of the precast concrete shop drawing submittal.

J.P. CARRARA & SONS, INC.

PRECAST/PRESTRESSED CONCRETE PRODUCTS

REQUEST FOR INFORMATION					
TO: Artie St. Onge		FROM: Mike Davis / Mike Weigand		oand	
A.L. St. Onge Contractor		DATE: 4/2	DATE: 4/22/16		
FAX NUMBER:		TOTAL N	TOTAL NO. OF PAGES INCLUDING COVER:		
802-326-4005		2			
PHONE NUMBER:		SENDER'S REFERENCE NUMBER:			
802-326-4792		RFI #4			
Waitsfie Waitsfie	` ') - Bridge No. 177; VT	100 over Mad River		
□ urgent	☑ FOR REVIEW	☑ PLEASE COMMENT	☐ PLEASE REPLY	☐ FOR YOUR USE	
PLEASE PROVII	DE AND/OR CLARIFY TI	HE FOLLOWING:			

RFI #4: Proposed Detailing & Fabrication of Abutment 2
Precast Pile Caps, Mark Nos. 'MD-PC1' & 'MD-PC5'

As currently detailed in the contract drawings and in the J. P. Carrara & Sons, Inc. "JPC" shop drawings, the exterior precast pile cap pieces, mark numbers 'MD-PC1' and 'MD-PC5' of Abutment 2 each include an integral cheekwall that projects over 6'0" above the bridge seat elevation. Due to geometric considerations for handling, these pieces must be shipped flat and therefore must be designed not only for vertical handling but also for rotation and horizontal handling. Upon further review of the lifting design, JPC is not comfortable that either precast pile cap, as presently configured, can be rotated in a safe and controlled manner with the integral cheekwall. In an effort to accommodate safe handling while maintaining the original detailing intent, JPC proposes the following:

- 1. JPC proposes that the cheekwall portion of the subject pile cap pieces above the elevation of the bridge seat is cast-in-place in the field.
- 2. JPC will detail the subject pile caps with vertical #6 projecting bars extending into the field cast cheekwall portion of the piece.
- 3. JPC will detail the projecting rebar above the bridge seat from wingwalls 'MD-WW3' and 'MD-WW4' to be #6 bars projecting with standard hooks, as shown in details F and G/F4.3, eliminating the NMB splice sleeves at this location.

- 4. After the subject pile cap pieces are installed in the field, and the adjacent wingwalls, 'MD-WW3' and 'MD-WW4' are installed in the field, pre-tied reinforcement for the cheekwalls shall be placed and the cheekwalls shall be formed using prefabricated forms. JPC proposes to use rapid setting concrete for the cheekwall placement, placed at the time that the pile cavities are placed.
- 5. The revisions proposed in items 1 4 above shall be incorporated as a revision to the JPC shop drawings.

Based on initial discussion with the general contractor and the design consultant, all parties are generally in agreement that the above proposal is acceptable from a design standpoint and that the construction sequencing in the field will not have a negative impact on the construction schedule.

Please contact us at 802-388-6363 with any questions or to discuss.